

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 09110561
PUBLICATION DATE : 28-04-97

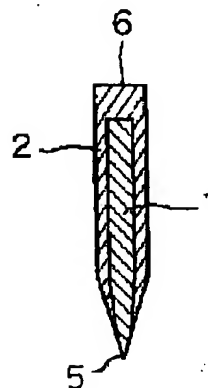
APPLICATION DATE : 24-10-95
APPLICATION NUMBER : 07275392

APPLICANT : KYOCERA CORP;

INVENTOR : YOMO KUNIhide;

INT.CL. : C04B 41/87 B26B 9/00 C04B 35/48

TITLE : SINTERED ZIRCONIA, ITS
PRODUCTION AND EDGED TOOL



ABSTRACT : PROBLEM TO BE SOLVED: To improve the water-resistance and increase the strength of a sintered zirconia by coating the surface of a partially stabilized sintered zirconia with an alumina layer.

SOLUTION: The objective sintered zirconia coated with an alumina layer is produced by applying a paste for forming an alumina layer or laminating an alumina-forming green sheet to a prescribed surface of a molded article composed of zirconia containing 2-15mol% of at least one kind of stabilizer selected from MgO, CaO and an oxide of a group 3a element of the periodic table such as Y_2O_3 or CeO_2 and baking the paste and the zirconia at the same time at 1,300-1,700°C. The sintered zirconia is suitable for an edged tool produced by coating the sintered zirconia 1 with an alumina layer 2 of $\geq 10\mu m$ thick excluding the edge part 5 to improve the water-resistance and the strength of the edged tool.

COPYRIGHT: (C)1997,JPO